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**PATENT**  
**Case SU-7275**

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**ERIC W. LIIMATTA**

**SERIAL NO.: 10/603,130**

**FILED: JUNE 24, 2003**

**MICROBIOCIDAL CONTROL IN THE  
PROCESSING OF POULTRY**

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Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450  
Sir:

**FOURTH SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**

Enclosed herewith for consideration by the Examiner is a Fourth Supplemental Information Disclosure Form PTO/SB/08A and PTO/SB/08B. There are 118 items listed, but only 93 are enclosed.

Respectfully Submitted,

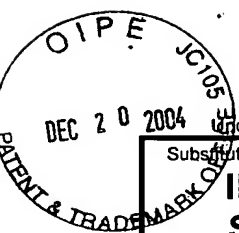
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Reg. No. 17,704  
Associate Attorney of Record

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Substitute for form 1449A/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**Fourth Supplemental  
(use as many sheets as necessary)**Complete if Known**

Application Number	10/603,130
Filing Date	June 24, 2003
First Named Inventor	Eric W. Limmatta
Group Art Unit	---
Examiner Name	---
Attorney Docket Number	SU-7275

Sheet **1** of **8****U.S. PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)			
	US-18	US-1995639	03-26-1935	Henderson	
	US-19	US-2443429	06-15-1948	Marks	
	US-20	US-2662855	09-07-1950	Kamlett	
	US-21	US-2779764	01-29-1957	Paterson	
	US-22	US-2815311	12-03-1957	Ellis, et al.	
	US-23	US-3412021	11-19-1968	Paterson	
	US-24	US-3519569	07-07-1970	Diaz	
	US-25	US-3558503	01-26-1971	Goodenough, et al.	
	US-26	US-3850833	11-26-1974	Kocheich, et al.	
	US-27	US-4235599	11-25-1980	Davis, et al.	
	US-28	US-4297224	10-27-1981	Macchiarolo, et al.	
	US-29	US-4557926	12-10-1985	Nelson, et al.	
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	US-31	US-4872999	10-10-1989	Schild, et al.	
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	US-33	US-5141652	08-25-1992	Moore, et al.	
	US-34	US-5209934	05-11-1993	Egis, et al.	
	US-35	US-5264136	11-23-1993	Howarth, et al.	
	US-36	US-5429723	07-04-1995	Atkinson	
	US-37	US-5464636	11-07-1995	Hight, et al.	
	US-38	US-5683654	11-04-1997	Dallmier, et al.	
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	US-40	US-6068861	05-30-2000	Moore, et al.	
	US-41	US-6069142	05-30-2000	Gaffney, et al.	
	US-42	US-6284144 B1	09-04-2001	Itzhak	

**FOREIGN PATENT DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
	FP-8	WO 89/10696	11-16-1989	Great Lakes Chemical		

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Substitute for form 1449/PTO <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  Fourth Supplemental (use as many sheets as necessary)		<b>Complete if Known</b>	
		Application Number	10/603,130
		Filing Date	June 24, 2003
		First Named Inventor	Eric W. Liimatta
		Group Art Unit	---
		Examiner Name	---
		Attorney Docket Number	SU-7275
Sheet	2	of	8

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	L-35	Clare, A.S., "Marine Natural Product Antifoulants: Status and Potential," Biofouling (1996) 9: 211-229.	
	L-36	S. Tsukamoto, et al., "Ceratinamides A and B: New Antifouling Dibromotyrosine Derivatives from the Marine Sponge <i>Pseudoceratina purpurea</i> ," Tetrahedron (1996) 52: 8181-8186.	
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<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		Application Number	10/603,130
		Filing Date	June 24, 2003
		First Named Inventor	Eric W. Liimatta
		Group Art Unit	---
		Examiner Name	---
Fourth Supplemental (use as many sheets as necessary)	Attorney Docket Number	SU-7275	
Sheet	3	of	8

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	L-48	F.W. Tanner and G. Pitner, "Germicidal Action of Bromine," Proceedings of the Society for Experimental Biology and Medicine (1939) 40: 143-145.	
	L-49	T.D. Beckwith and J.R. Moser, Journal of the American Water Works Association (1933) 25: 367-374.	
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	L-51	J. A. McCarthy, Journal of the New England Water Works Association (1944) 58: 55-68.	
	L-52	O. Wyss and R.J. Stockton, "The Germicidal Action of Bromine," Arch. Biochem. (1947) 12:267-271.	
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	L-54	G.M. Fair, et al., "The Behavior of Chlorine as a Water Disinfectant," Journal of the American Water Works Association (1948) 40: 1051-1061.	
	L-55	E.K. Rideal and U.R. Evans, "The Effect of Alkalinity on the Use of Hypochlorites," Journal of the Society of the Chemical Industry (1921) 40: 64R-66R	
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		Attorney Docket Number	SU-7275
Fourth Supplemental (use as many sheets as necessary)			
Sheet	4	of	8

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	L-62	J.K. Johannesson, "The Bromination of Swimming Pools," American Journal of Public Health (1960) 50: 1731-1736.	
	L-63	J.D. Johnson and W. Sun, "Bromine Disinfection of Wastewater," in "Disinfection-Water and Wastewater," J.D. Johnson, ed., pp 179-191 (Ann Arbor, MI: Ann Arbor Science, 1975).	
	L-64	J.K. Johannesson, "Anomalous Bactericidal Action of Bromamine," Nature (1958) 181: 1799-1780.	
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	L-66	Y. Kott et al., "Effect of Halogens on Algae-III. Field Experiment," Water Research (1969) 3: 265-271.	
	L-67	N. Betzer and Y. Kott, "Effect of Halogens on Algae-II. <i>Cladophora sp.</i> ," Water Research (1969) 3: 257-264. 14 pages	
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	L-70	P.J. Sullivan and B.J. Hepburn, "The Evolution of Phosphonate Technology for Corrosion Inhibition," paper 496 (Houston, TX: NACE International, 1995), ppg 496/1 - 496/13.	
	L-71	W.A. Brungs, "Effects of Residual Chlorine on Aquatic Life," Journal of the Water Pollution Control Federation (1973) 45: 2180-2193.	
	L-72	A.T. Palin, "The Determination of Free and Combined Chlorine in Water by the Use of Diethyl-p-phenylene diamine," Journal of the American Water Works Association (1957) 49: 873-880.	
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	L-76	S. Barratt and C.P. Stein, "On Bromine Chloride," Proceedings of the Royal Society (London) (1929) vol 122: 582-588.	
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	L-78	E.C. Wackenhuth and G. Levine, "An Investigation of Bromine Chloride as a Biocide in Condenser Water," (Pittsburgh, PA: Engineer's Society of Western Pennsylvania, 1974), pgs 1-14.	
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	L-82	G.D. Nelson, "Chloramines and Bromamines," in Kirk Othmer Encyclopedia of Chemical Technology, Vol. 5, pp 565-580 (New York, NY: John Wiley and Sons, 1979).	
	L-83	Z. Zhang and J.V. Matson, "Organic Halogen Stabilizers: Mechanisms and Disinfection Efficiencies," paper TP89-05 (Houston, TX: Cooling Tower Institute, 1989), pgs 1-19.	
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	L-85	D. Vanderpool, M. Killoran, and R. Sergeant, "Improving the Corrosion Inhibitor Efficiency of Tolyltriazole in the Presence of Chlorine and Bromine," paper 157 (Corrosion 87, San Francisco, CA, 1987), ppg 157/1-157/9.	
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	L-88	D.S. Larson, et al., "Improved Microbiological Control Using Halogen Donors in a Pasteurizer," MBAA Technical Quarterly (1993) 30: 173-178.	

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	L-89	P. Sweeney, M. Ludensky, and O. Barokhov, "Mill Performance of a Brominated Methylethylhydantoin Slimicide," pp 437-447, Proceedings of the 1999 TAPPI Papermakers Conference (Norcross, GA: TAPPI, 1999).	
	L-90	F.J. Himpler, P.G. Sweeney, and M.L. Ludensky, "The Benefits of a Hydantoin-Based Slimicide in Papermaking Applications," APPITA Journal (September 2001) 54: 427-430.	
	L-91	C.J. Nalepa, "New Bromine-Releasing Granules for Microbiological Control of Cooling Water," paper 03716 (Corrosion 2003 Houston, TX: NACE International, 2003), ppg 03716/1-03716/15.	
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Substitute for form 1449/PTO		<b>Complete if Known</b>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>		Application Number	10/603,130
		Filing Date	June 24, 2003
		First Named Inventor	Eric W. Liimatta
		Group Art Unit	---
		Examiner Name	---
Fourth Supplemental (use as many sheets as necessary)	Attorney Docket Number	SU-7275	
Sheet	7	of	8

OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
	L-103	Howarth et al., "First Field Trials of Single-Feed, Liquid Bromine Biocide For Cooling Towers", Paper TP00-09 (Houston, Tx.: Cooling Technology Institute, Jan. 31-Feb 2, 2000), 17 pages	
	L-104	M. Enzien and B. Yang, "On-line Performance Monitoring of Treatment Programs for MIC Control," paper 01279 (Corrosion 2001, Houston, TX: NACE International, 2001), 13 pages.	
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	L-111	L.. McNamee, "Efficacy of Hypochlorite vs. Hypobromite in the Removal of a <i>Pseudomonas aeruginosa</i> Biofilm," summer intern report (Bozeman, MT: Montana State University, Center for Biofilm Engineering, 2000). ppg 1-23.	
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	L-114	"AWT Legionella Position Paper: 2003 Update," (McLean, VA: Association of Water Technologies, 2003). ppg 1-33.	

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		First Named Inventor	Eric W. Liimatta
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OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
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	L-115	"Minimizing the Risk of Legionellosis Associated with Building Water Systems," ASHRAE Guideline 12-2000 (Atlanta, GA: ASHRAE, 2000), 19 pages.	
	L-116	"Legionellosis Guideline: Best Practices for Control of Legionella," (Houston, TX: Cooling Tower Institute, February 2000), 8 pages.	
	L-117	Legionellosis: Guidelines for Control of Legionnaires' Disease," (Melbourne, Australia: Health Department Victoria, 1989, (reprinted in 1999), 9 pages.	
	L-118	"Control of Legionella in Cooling Towers: Summary Guidelines," (Madison, WI: Wisconsin Division of Health, August 1987), 45 pages.	
	L-119	M.R. Freije, "Legionellae Control in Health Care Facilities: A Guide for Minimizing Risk," (Indianapolis, IN: HC Information Resources, Inc., 1996, ppg 25-41.	
	L-120	Regulatory Advisory, Waterborne Pathogens - Compliance with Joint Commission on Accreditation of Healthcare Organizations Requirements, web address <a href="http://www.ashe.org/media/water.html">www.ashe.org/media/water.html</a> , visited 6/12/2002, 9 pages.	
	L-121	E. McCall, J.E. Stout, V.L. Yu, and R. Vidic, "Efficacy of Biocides against Biofilm-Associated Legionella in a Model System," paper IWC 99-19 (Pittsburgh, PA: Engineers' Society of Western Pennsylvania, 1999), 7 pages.	
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